

## **ENOTE 0062**

### **Replacing a Bound FieldServer in LonMaker**

#### *Overview*

This document describes how to update or replace a FieldServer existing in a Bound configuration on a LonWorks network without having to re-create the existing bindings. Typically, changes to the FieldServer's configuration file such as adding new LonWorks network variables result in the need to update or replace the FieldServer device in the LonMaker network configuration. It must be understood that major changes such as deleting network variables already bound in the network will result in those bindings to be deleted when the FieldServer device is updated in LonMaker.

#### **Replacement procedure**

- 1) Upload the `fserver.xif` file from the FieldServer using Ruinet. Save it as `fserver_old.xif`
- 2) Update the FieldServer's `config.csv` file with your changes and download the changed `config.csv` file to the FieldServer using Ruinet. Restart the FieldServer.
- 3) Wait until the FieldServer has started up by connecting with Ruinet then upload the newly created `fserver.xif` file from the FieldServer.
- 4) View `fserver.xif` and `fserver_old.xif` using a text viewer program like Windows Notepad. Each file should look like this:

```
File: fserver.xif generated by LonDriver Revision 1.19(d), XIF
Version 4.0
Copyright (c) 2000-2004 by FieldServer Technologies
All Rights Reserved. Run on Wed Sep 29 15:33:39 2004
```

```
80:00:95:47:1E:02:04:EE
```

Compare the model numbers of the Program IDs from each file. The model number is always the last of the 8 numbers separated by semicolons. In the above excerpt from the XIF file, the model number is `EE`. The model numbers must differ for the replace to work. The reason is that every FieldServer LonWorks configuration has to have a unique Program ID. LonMaker already knows the Program ID of the original configuration and will prevent the replace procedure if the device to be replaced has a changed LonWorks configuration but still the same Program ID.

The FieldServer's first 7 numbers of the Program ID are fixed and only the last number (model number) is changed everytime the LonWorks configuration in the `config.csv` file is changed. The FieldServer calculates the model number using a checksum routine on the LonWorks map descriptor names and it may happen that the model number is exactly the same for two different configurations.

If the model numbers are not the same, proceed to the next step. If the model numbers are the same, slightly change the name of an existing or new LonWorks map descriptor in the updated `config.csv` file eg.

Old LonWorks map descriptor

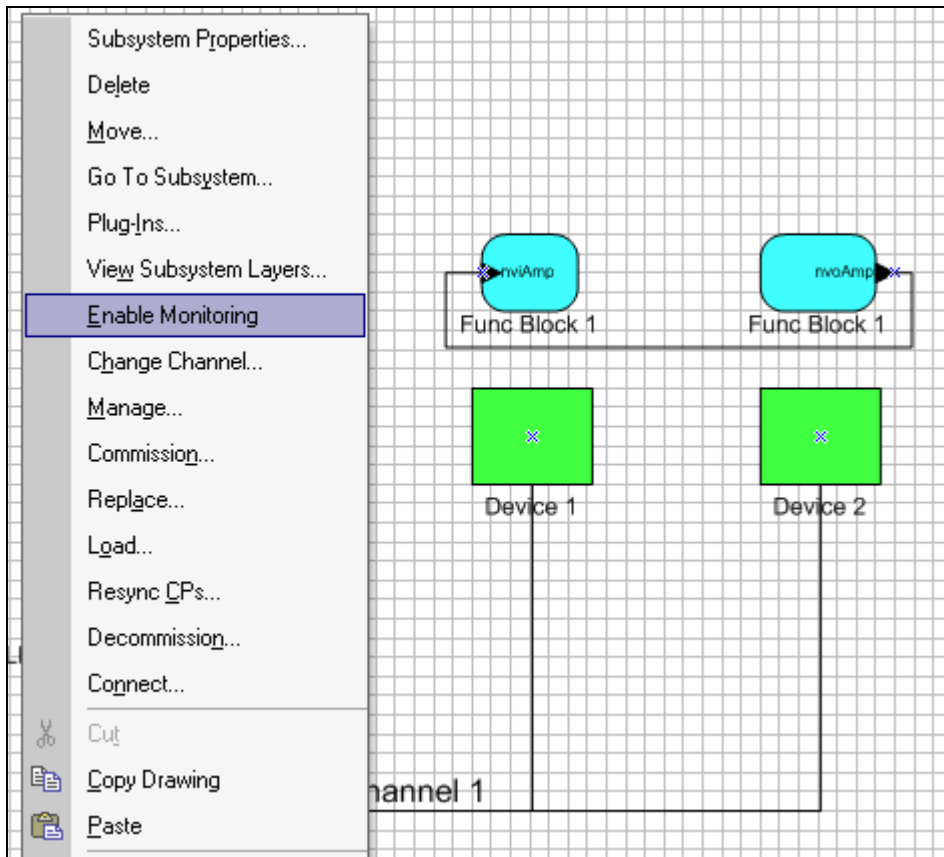
```
nvoAmp ,0s ,DA_001 ,0 ,NVUOEXC ,WRBC ,Lon_Srv_11 ,000 ,SNVT_amp
```

Changed LonWorks map descriptor

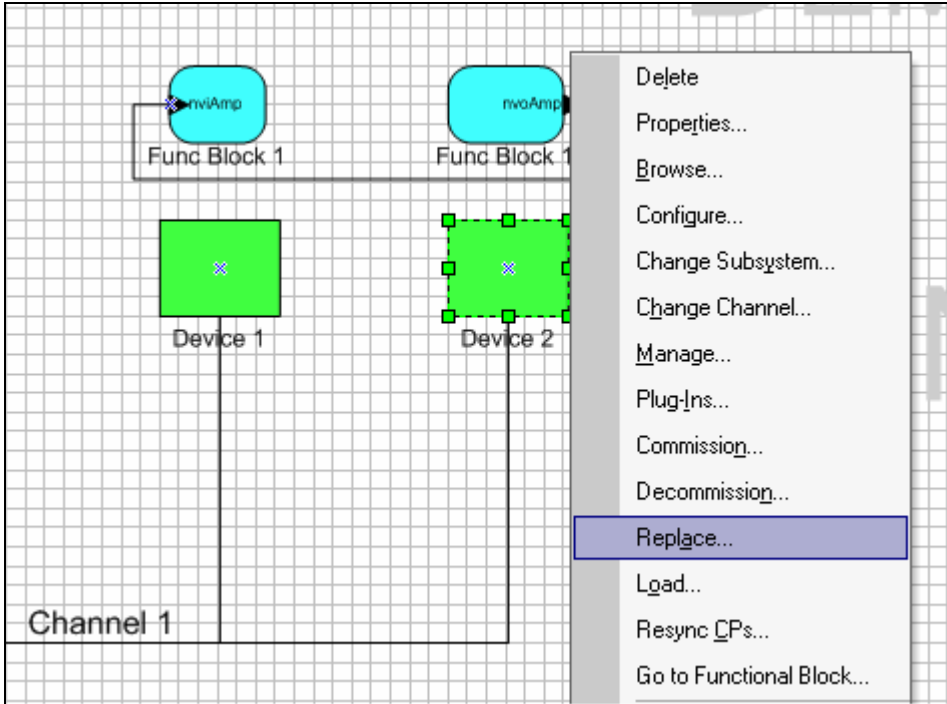
```
nvoAmp1 ,0s ,DA_001 ,0 ,NVUOEXC ,WRBC ,Lon_Srv_11 ,000 ,SNVT_amp
```

Download the changed `config.csv` to the FieldServer and restart it again. Upload the newly created `fserver.xif` and compare it again against the `fserver_old.xif` file. Repeat this step until the Program ID's model numbers are different, then proceed to the next step.

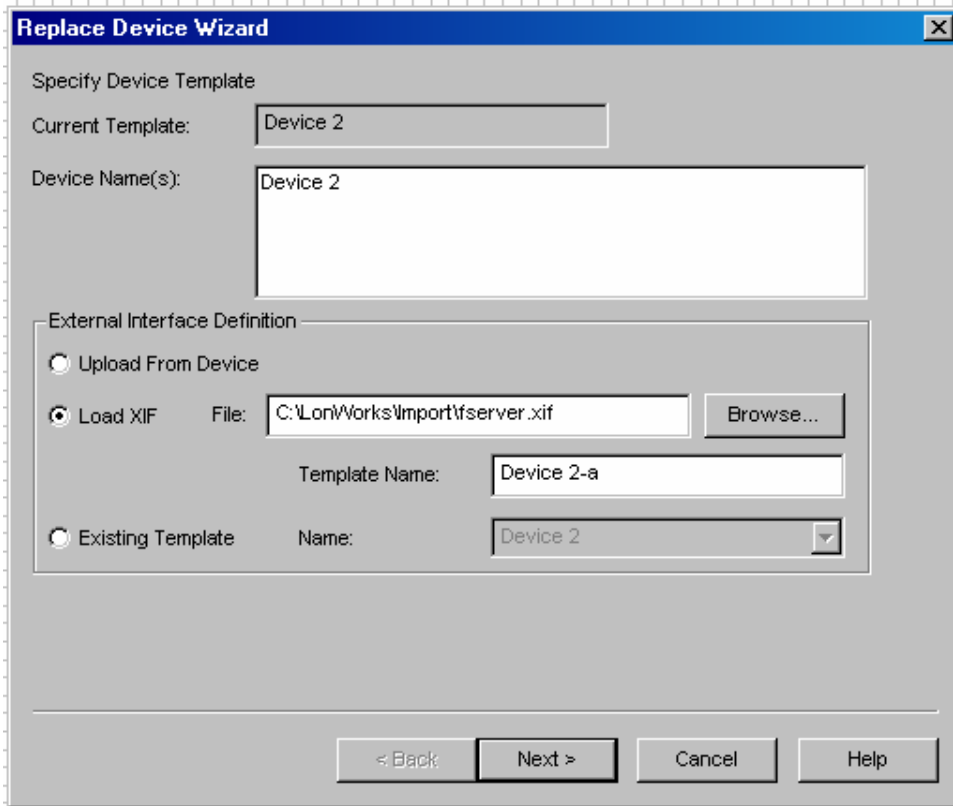
- 5) Save the `fserver.xif` file in the \ the %System Root%\LonWorks\Import folder of the LonMaker PC. (%System Root% is the drive letter, typically C: where LonMaker is installed.)
- 6) Open the LonMaker network containing the FieldServer.
- 7) Close any network variable Browsers and turn off Monitoring by right-clicking on the network sheet and then deselecting "Enable Monitoring":



8) Right-click on the FieldServer device and select Replace:



- 9) Select Load XIF and then click Browse and select the fserver.xif file you previously copied to %System Root%\Lonworks\Import . Enter a new unique template name and then click Next:



**Replace Device Wizard**

Specify Device Template

Current Template: Device 2

Device Name(s): Device 2

External Interface Definition

Upload From Device

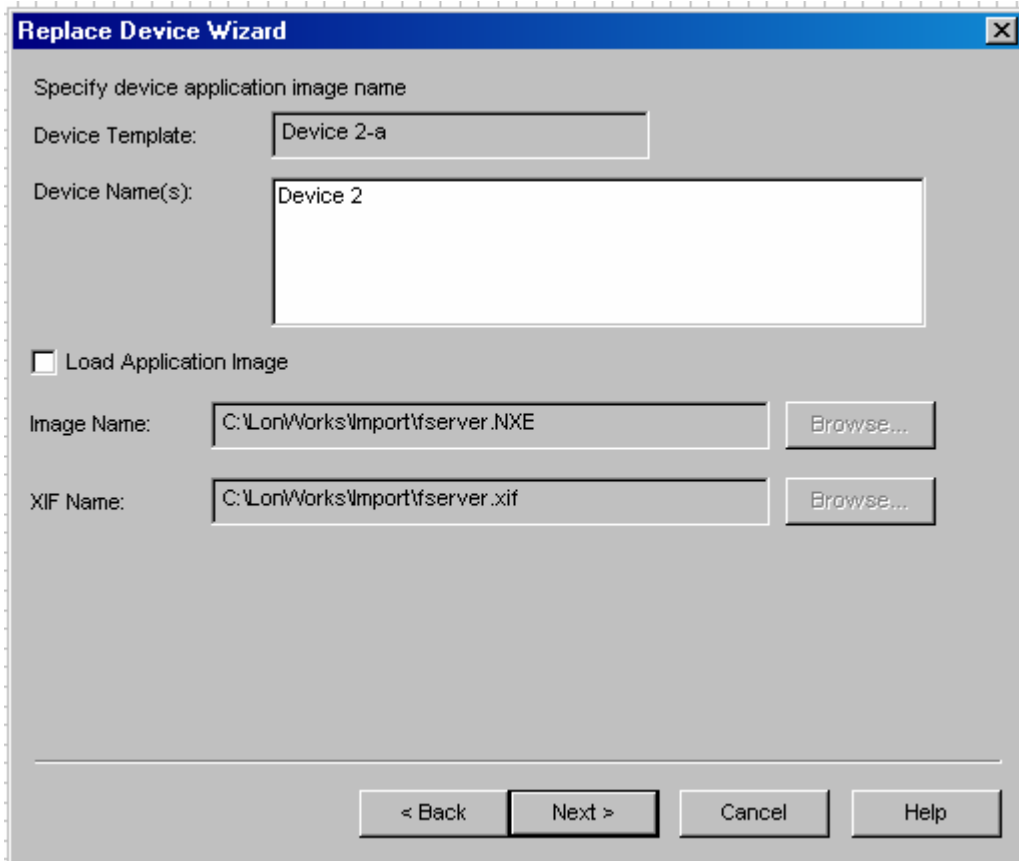
Load XIF File: C:\LonWorks\Import\fserver.xif Browse...

Template Name: Device 2-a

Existing Template Name: Device 2

< Back Next > Cancel Help

10) Make sure Load Application Image is NOT clicked! Downloading a new application will corrupt the FieldServer.



**Replace Device Wizard**

Specify device application image name

Device Template: Device 2-a

Device Name(s): Device 2

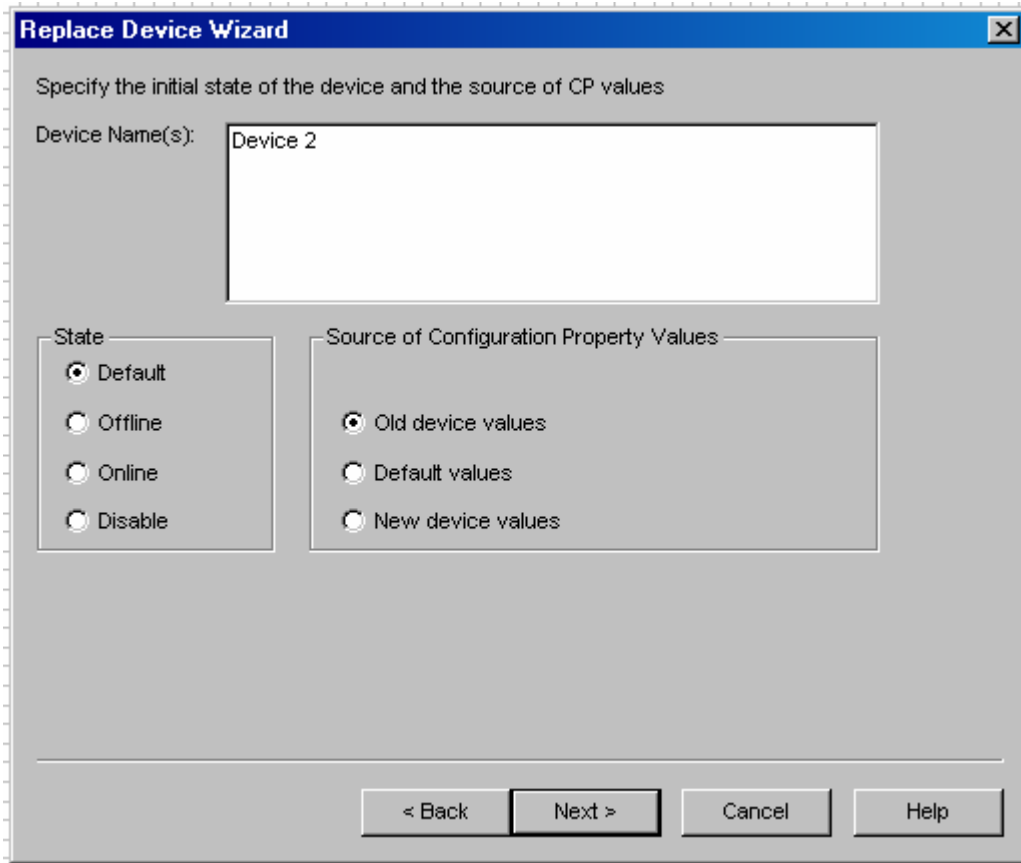
Load Application Image

Image Name: C:\Lon\Works\Import\fsserver.NXE Browse...

XIF Name: C:\Lon\Works\Import\fsserver.xif Browse...

< Back Next > Cancel Help

11) Select Default State and Old Device Values, click Next:



**Replace Device Wizard**

Specify the initial state of the device and the source of CP values

Device Name(s): Device 2

State

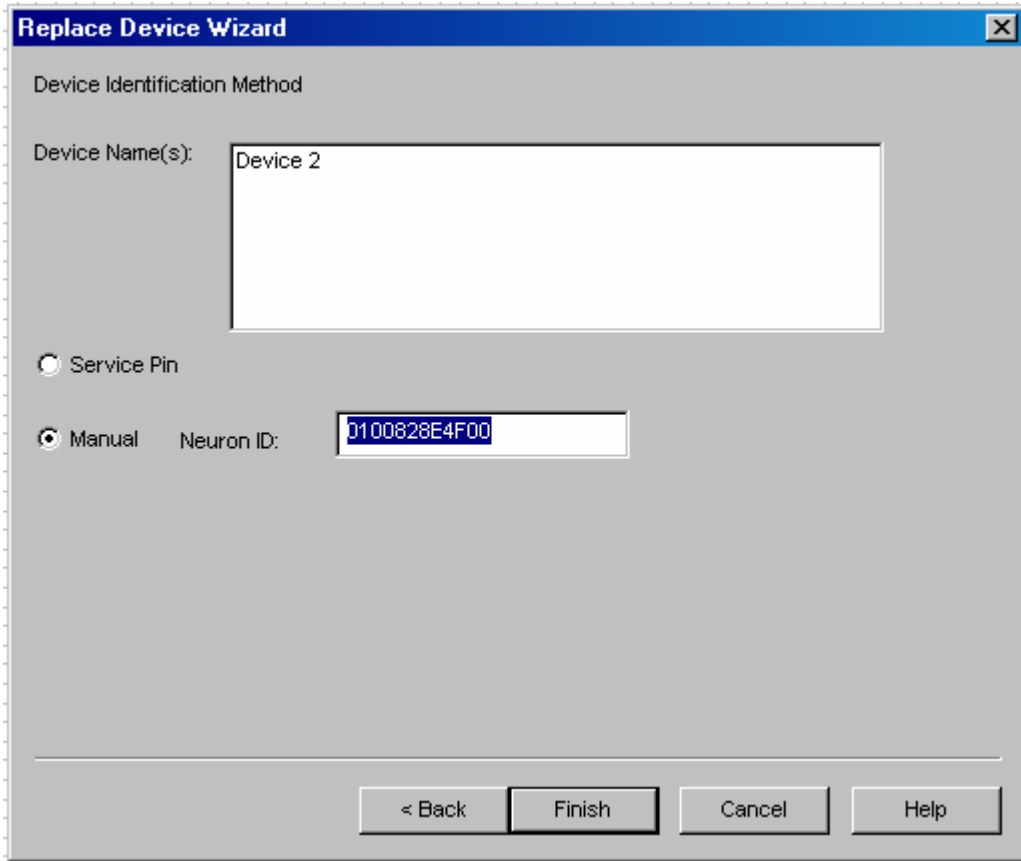
- Default
- Offline
- Online
- Disable

Source of Configuration Property Values

- Old device values
- Default values
- New device values

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12) Select Manual and leave the Neuron ID as specified then click Finish:



Replace Device Wizard

Device Identification Method

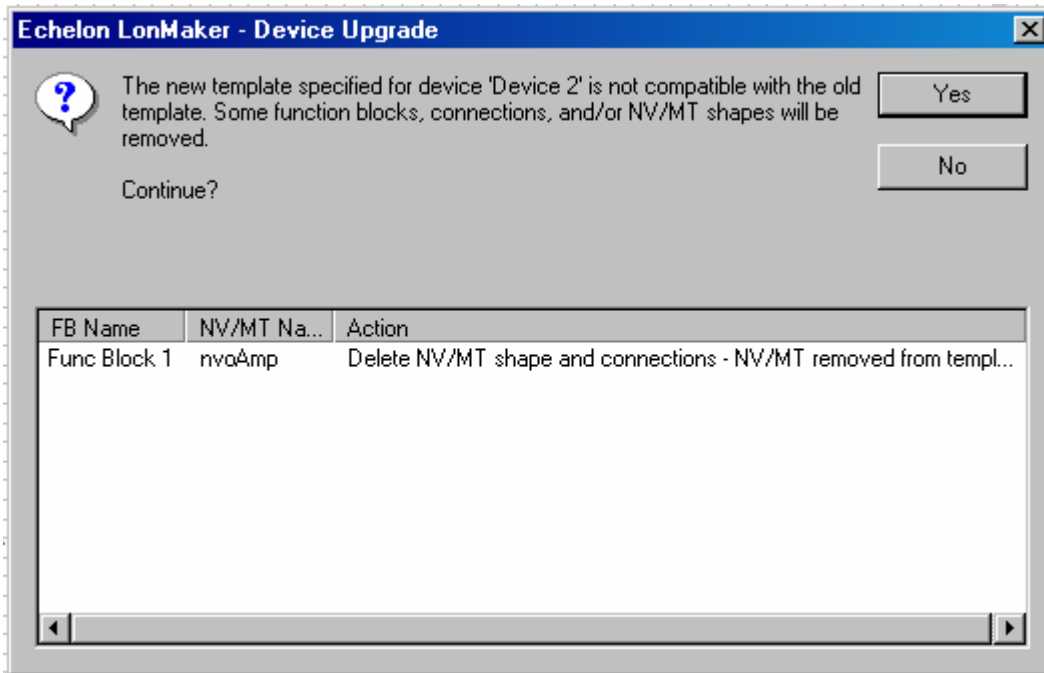
Device Name(s): Device 2

Service Pin

Manual Neuron ID: 0100828E4F00

< Back Finish Cancel Help

- 13) If you made major changes you may get the following screen warning you of bindings that may be deleted. If you just added Network Variables without changing the existing configuration you should not get the warning screen. Click Yes to Continue or No if you want to opt out. . Note: This will only happen if you have made changes to Network Variables which are shown in Function Blocks or were previously bound in the network.



- 14) If you added new Network Variables, drag the “Input/Output Network Variable” shape onto the FieldServer device and you should be presented with a list of new Network Variables. Select the Network Variable you want to add and click Ok to add it to the FieldServer’s functional block.
- 15) This completes the replace procedure. You can now make new bindings if necessary.

**Troubleshooting**

- If the replacement procedure did not work, read through it again carefully to ensure that all steps were followed carefully.
- If the procedure did not work, then it may be that LonMaker did not delete the old .xfb and .xfo files for the FieldServer. Delete these files (for the FieldServer only), and retry the replacement procedure. These files are located in the same location as the xif you moved earlier in this procedure.

**Revision History**

Date	Resp	Rev	Comment
9/30/04	DR	0	Created
1/26/05	GFM	1	Added Customer comments